

CLAIMS:

1. An amplifier arrangement comprising an audio input, an audio output, a switching regulator and a switching amplifier, wherein the switching regulator is arranged to receive a variable DC electrical input from a power supply and output a substantially constant voltage to the switching amplifier.
2. The amplifier arrangement according to claim 1, wherein the switching amplifier is a digital amplifier.
3. The amplifier arrangement according to claim 1 or claim 2, wherein the switching amplifier is a class D digital amplifier with associated H-bridge circuit on the output stage.
4. The amplifier arrangement according to anyone of the preceding claims, wherein the circuitry of either the switching regulator and/or the switching amplifier is constructed of discrete components.
5. The amplifier arrangement according to anyone of the preceding claims, wherein the switching amplifier processes at least two channels of audio input.
6. The amplifier arrangement according to anyone of the preceding claims, further including an auxiliary control device, e.g. to control the audio output volume.
7. The amplifier arrangement according to anyone of the preceding claims, wherein the switching regulator and the switching amplifier are housed in a single housing.
8. A distributed audio installation comprising the amplifier arrangement

according to anyone of the preceding claims, further including a remote power supply arranged to provide said variable DC electrical input.

- 5 9. The distributed audio installation according to claim 8, wherein the power supply is connectable to the amplifier arrangement via a cable which varies in length between a preselected maximum e.g. 50m, and a preselected minimum, e.g. 1m.
10. The distributed audio system according to claim 9 or claim 10, wherein the cable is less than 24awg (137×10^{-3} ohm/m).
- 10 11. The distributed audio system according to any one of claims 8 to 10, wherein the power supply is connectable to a plurality of amplifier arrangements via respective electrical cables.
12. An amplifier arrangement as hereinbefore described with reference to, and/or as illustrated by, the accompanying drawings.
- 15 13. A distributed audio system as hereinbefore described with reference to, and/or as illustrated by, the accompanying drawings.